

# PARALLEL REACTOR WITH KNIFE-EDGE SEAL

## ABSTRACT OF THE DISCLOSURE

An apparatus for use in parallel reaction of materials. The apparatus includes a base having a plurality of reaction wells formed therein and a sealing device positioned over the reaction wells for individually sealing each of the reaction wells. One of the sealing device and the base having chamfered ridges extending generally around a periphery of each of said plurality of reaction wells. The other of the sealing device and the base having a contact surface formed of a material softer than the material of the chamfered ridges to create a knife-edge seal between the sealing device and the base when the sealing device and the base are forced into contact with one another.